

PATENT ABSTRACTS OF JAPAN

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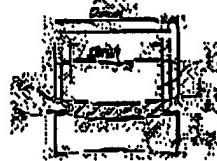
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(2) Date of filing : 08.10.1993 (72) Inventor : TERAMOTO SATOSHI

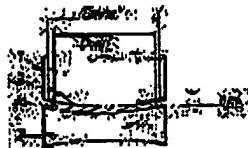
1) MANUFACTURE OF COMPOSITE OPTICAL ELEMENT

1) Abstract:

OBJECT: To allow an entire side face of a resin layer arrive at an outside of an optical effective diameter without increasing an outer diameter of a base material forming a desired resin layer in molds for an optical element when a difference between an effective diameter of a surface of the layer and a diameter of a base material of the element to an unevenness Δx of a maximum diameter of the layer is large and setting a molding surface interval of a part out of an effective diameter of the molds and a molding surface of the same base material to a formula or less.



CONSTITUTION: When an interval between a base material 2 and a mold 1 is (t), the mold 1 is pressed to press an intermediate part 3a of a resin layer 3 at the time of molding to a central axis side. When a maximum diameter of the layer 3 is D_{max}, a minimum diameter is D_{min} and its difference is ΔD , at the time of 0.5t of the interval, its maximum diameter is D'_{max}, its minimum diameter is D'_{min}, and its difference is $\Delta D'$, $\Delta D=2\Delta D'$ is satisfied. When the (t) is set to a half, $\Delta D/2$ becomes about a half, and relationship of $(t)=32.4+76\Delta D$ is satisfied. Accordingly, when a difference of the effective diameters is δ , an interval of δ of the effective diameters may be set to $(32.4+3.76\delta)$ or less. In fact, since unevenness of $\pm \Delta x$ occurs in the maximum diameter of the layer, it is necessary to set the interval to $32.4+3.76(\mu-\Delta x)\mu\text{m}$ or less.



2) STATUS

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技術表示箇所

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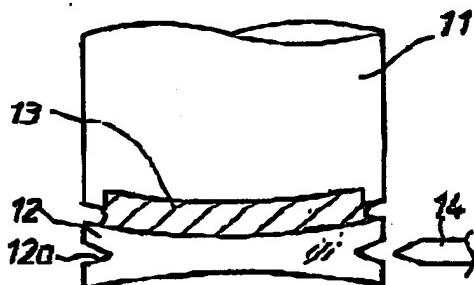
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4) 【説明の名称】 槍合型光学素子の製造方法

7) 【要約】

目的] 樹脂層側面の最大径と最小径との差を小さくする。これにより、樹脂層の有効径と基材径との差を小さくし、製品のよりいっそうのミニパクト化を可能とする。

[構成] 金型11は上下動自在に保持され、金型11光学面の有効径の外周部分は基材との間隔が有効径内部よりも狭くなる様に突出した形状に形成されてい



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